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BELLSOUTH

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May 31, 2000

Mr. Dale N. Hatfield
Federal Communications Commission
445 12th Street SW. Room 7-C155
Washington, D.C. 20554

RE: Final Service Disruption Report


Dear Mr. Hatfield:

Pursuant to the requirements of the Commission's Order in CC Docket 91-273, released February 27, 1992, BellSouth Telecommunications, Incorporated submits a Final Service Disruption Report for a service outage that occurred May 1, 2000.

The attached final report completes our response on the May 1, 2000 outage. It includes an update of the information previously provided in the 120-minute Service Disruption Report that was sent to the Commission's Watch Office on May 1, 2000.

- If you have any questions concerning this report, please contact the undersigned.

Sincerely,


Ben G. Almond
Vice President – Federal Regulatory

Attachment

Cc: Robert Kimball

FINAL SERVICE DISRUPTION REPORT

This Final Service Disruption report is filed by BellSouth Telecommunications Inc., in accordance with both the First and Second Report and Order Amendment of Part 63.100 of the Federal Communications Commission's rules. A 120-Minute Initial Service Disruption Report for this May 1, 2000 outage in Tupelo, Mississippi was filed with the FCC Watch Officer on May 1, 2000.

GEOGRAPHIC AREA AFFECTED:

The Tupelo—Main central office (TUPLMSMA07T) is a 5ESS® switch that serves business and residence customers and acts as a LATA and local tandem switch for surrounding communities in LATA 482

DURATION OF OUTAGE:

This outage began on May 1, 2000 at 10:55:00AM EDT and ended at 12:01PM EDT for a total duration of 1 hour 6 minutes.

ESTIMATED NUMBER OF CUSTOMERS AFFECTED:

There were 52,803 customers potentially affected by this incident. Local operations reported BellSouth received 262 trouble reports.

TYPES OF SERVICE AFFECTED:

Intra-office, Inter-office, Inter-LATA, Intra-LATA services were affected.

ESTIMATED NUMBER OF BLOCKED CALLS:

There were approximately 485,698 blocked calls during this service outage.

APPARENT OR KNOWN CAUSE OF THE INCIDENT:

The outage is a result of several discrete errors made by BellSouth's switch vendor during a hardware conversion process on a Communications Module.

ROOT CAUSE:

A chain of three inter-related events caused this outage.

1. The switch vendor's engineering organization failed to realize this site was a local and LATA tandem during the equipment-ordering segment of the conversion process. This caused an inappropriate network clock to be equipped at the site. Specifically a stratum three, medium stability, clock was installed rather than a stratum two, high stability clock circuit pack.
2. The vendor's installer failed to recognize that a diagnostic phase indicated a mismatch between the clock hardware and the switch database.
3. The vendor's technical support group did not anticipate the switch reaction when the database was modified to reflect the installed hardware.

METHODS USED TO RESTORE SERVICE:

The switch recovered automatically under control of the generic program.

STEPS TO PREVENT RECURRENCE:

1. The switch vendor will review all pending conversion jobs for accuracy.
2. The vendor has created an engineering conversion team to review each future job of this type.
3. The vendor will develop standard installation documentation for this process.
4. The operating company's technical support organization will jointly review non-standard procedures with local operations and the vendor before the work activity is performed
5. The vendor and the operating company will perform these procedures on either Friday or Saturday nights ensuring that low traffic days initially follow the process completion.
6. The vendor will change the conversion process to include a hardware verification checklist.
7. The vendor will inform the operating company organization of all potentially service-affecting activity, particularly that which extends into the normal business day.

EVALUATION OF EFFECTIVENESS AND APPLICATION OF NRC RECOMMENDATIONS AND BEST PRACTICES:

A review of the incident confirms the findings of *Network Reliability: Report to the Nation* (June 1993), Section C, Paragraph 5.1.3.5 under Telco Procedures Recommendations, states "System suppliers should strive for simplicity in developing procedures for maintenance, hardware growth, and software changes." This can also be applied to the vendor. The installer's job knowledge and technical knowledge by a support organization, while a final crosscheck, should not be a substitute for adequate engineering procedures.

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☒ 120 Minute Initial Report

SERVICE DISRUPTION

☐ 72 Hour Initial Report

TO: FCC Watch Officer Washington, D. C.	FAX No.: (202)-418-2812 or FAX No.: (202)-418-2813 Tel. No.: (202)-632-6975	OR	TO: FCC Watch Officer Columbia Operations Center Columbia, Maryland	FAX No.: (301)-725-2521 Tel. No.: (301)-725-2278
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FROM: BellSouth Telecommunications	Reported Initiated By: Susan Kirkman Contact No.: (404-321-2516)
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Date of Incident:	5/1/2000	Time of Incident:	10:55	AM	<input checked="" type="checkbox"/> EDT	<input checked="" type="checkbox"/>
				PM	<input type="checkbox"/> CDT	<input type="checkbox"/>
Date of BST's Knowledge of Incident:	5/1/2000	Time of Knowledge:	11:05am	AM	<input checked="" type="checkbox"/> EDT	<input checked="" type="checkbox"/>
				PM	<input type="checkbox"/> CDT	<input type="checkbox"/>

Estimated Number of Customers Affected: Actual: Potential 52,803

Duration of Incident: 1 hour Estimated Number of Blocked Calls: To be determined

Geographic Area:		Types of Services Affected:	
City:	Tupelo	<input checked="" type="checkbox"/> Intra-Office	<input type="checkbox"/> 911
State:	Mississippi	<input checked="" type="checkbox"/> Inter-Office	<input type="checkbox"/> Congestion
CLLI:	TUPLMSMA07T	<input checked="" type="checkbox"/> Intra-LATA	<input type="checkbox"/> Operator Services
LATA #:	482	<input checked="" type="checkbox"/> Inter-LATA	<input type="checkbox"/> LIDB/800
<input type="checkbox"/> Rural	<input checked="" type="checkbox"/> Metro	<input type="checkbox"/> Suburban	

Switch Types:		Category of Incident Which Makes this Reportable:		
<input type="checkbox"/> ATT 1AESS	<input type="checkbox"/> NTI DMS 200	<input checked="" type="checkbox"/> Local Switch	<input type="checkbox"/> SS7	<input checked="" type="checkbox"/> >50,000 Lines
<input checked="" type="checkbox"/> ATT SESS	<input type="checkbox"/> NTI STP	<input type="checkbox"/> TOPS	<input type="checkbox"/> Congestion	<input type="checkbox"/> 30,000 to 49,999 Lines
<input type="checkbox"/> ATT STP	<input type="checkbox"/> Siemens EWSD	<input type="checkbox"/> Tandem (Local)	<input type="checkbox"/> Facility	<input type="checkbox"/> Fire
<input type="checkbox"/> NTI DMS 100	<input type="checkbox"/> Ericsson STP	<input checked="" type="checkbox"/> Tandem (LATA)	<input type="checkbox"/> Special 911	<input type="checkbox"/> FAA/Media Attention
<input type="checkbox"/> NTI DMS 100/200	<input type="checkbox"/> Alcatel STP			
<input type="checkbox"/> OTHER:				

Apparent or Known Cause of Incident: To be determined

Methods to Restore Service: To be determined

Steps to Prevent Recurrence: To be determined

BST Contact: B. G. Almond Director - Federal Regulatory Tel. #: (202)-463-4112 FAX #: (202)-463-4198	Date Faxed to FCC: Time Reported To FCC: AM PM FCC Contact:	<input type="checkbox"/> EDT <input type="checkbox"/> CDT
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